

# EXHIBIT 26

**PUBLIC VERSION -  
CONFIDENTIAL MATERIAL OMITTED IN FULL**

# EXHIBIT 27

**PUBLIC VERSION - CONFIDENTIAL MATERIAL OMITTED**

# Terms of Use

## Terms of Use of the Ryanair Website

### 1. General

The owner of this website is Ryanair DAC, an Irish company, No 104547, located at Ryanair Dublin Office, Airside Business Park, Swords, Co. Dublin, Ireland ("Ryanair"). By using this website or its content, whether directly or through a third party, you agree to be legally bound by and act in accordance with these Terms of Use. In particular you agree not to do the acts prohibited under paragraphs 3 to 7 below. If you disagree with these Terms of Use, you are not permitted to, and agree not to, use this website or its content.

### 2. Exclusive online distribution channel.

This website is the only website authorised to sell Ryanair Group flights (where "Ryanair Group" includes Ryanair DAC, Ryanair Sun, Ryanair UK, AOC Lauda Europe and Malta Air), whether on their own or together with any other services. Price comparison websites may apply to enter into a written Licence Agreement with Ryanair, which permits such websites to access Ryanair Group airlines' price, flight and timetable information for the sole purpose of price comparison.

### 3. Permitted use.

You are not permitted to use this website (including the mobile app and any webpage and/or data that passes through the web domain at ryanair.com), its underlying computer programs (including application programming interfaces ("APIs")), domain names, Uniform Resource Locators ("URLs"), databases, functions or its content other than for private, non-commercial purposes. Use of any automated system or software, whether operated by a third party or otherwise, to extract any data from this website for commercial purposes ("screen scraping") is strictly prohibited.

#### 4. Reservation of all rights to ensure permitted use and/or prevent unauthorised use.

Ryanair reserves the absolute right to take all actions it considers necessary against all parties howsoever involved in the unauthorised use of its website and without notice, in order to vindicate its rights and prevent such unauthorised use, including using blocking technology (which may itself involve conducting automated searches of such parties' websites, screen scraping therefrom, causing such parties to screen scrape Ryanair's website, breaching the terms of use such parties' websites, or any similar or associated actions) and/or issuing legal proceedings.

#### 5. Consent to Ryanair investigating breaches.

Ryanair reserves the absolute right to conduct all necessary investigations (whether by the use of technology or otherwise) of any breaches of these Terms of Use. By accessing this website, you consent to Ryanair conducting all necessary investigations to prevent unauthorised use of its website.

#### 6. Intellectual property.

All information, data, underlying computer programs (including APIs), domain names, URLs, databases, and materials presented on this website, including names, logos, flight schedules, prices, etc., as well as the colour scheme and the layout of the website, are subject to copyright, trade mark rights, database rights and/or other intellectual property rights. You may use such content only as strictly required for permitted personal, non-commercial purposes. Any other use and/or reproduction of such content, without the prior written consent of Ryanair, is prohibited and will constitute a breach of these Terms of Use and may infringe Ryanair's IP rights.

#### 7. Links to this website.

You may not establish and/or operate links to this website without the prior written consent of Ryanair.

#### 8. Limited liability.

Ryanair will not be held liable for any losses and/or damages arising from the use of this website or of any other website to which this website provides a link, and/or from the use of information presented on this or any such other website.

#### 9. Applicable law and jurisdiction.

It is a condition precedent to the use of any Ryanair Group website, including access to

information relating to flight details, costs, etc., that any such party submits to the sole and exclusive jurisdiction of the Courts of the Republic of Ireland and to the application of the law in that jurisdiction (except as otherwise provided by mandatory consumer law provisions), including any party accessing such information or facilities on their own behalf or on behalf of others. In the absolute and sole discretion of Ryanair, a legal action may be brought by Ryanair against any party in breach of these terms and conditions, at its election, in Ireland or the place of breach or the domicile of that party, and, if more than one party, in the domicile of any one of those parties, and all other parties shall submit to that jurisdiction. For the sake of clarity, where a passenger or person carried or to be carried pursuant to a contract of carriage with any of the Ryanair Group airlines wishes to institute proceedings against a Ryanair Group airline on foot of that contract for carriage, then those proceedings shall be brought by the passenger solely in accordance with the provisions of the Montreal Convention 1999 and EU Regulation No. 2027/1997 (as amended by Regulation No. 889/2002) or such further amendment to the Montreal Convention or further amendment by Regulation as may arise from time to time.

# EXHIBIT 28

**PUBLIC VERSION - CONFIDENTIAL MATERIAL OMITTED**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

RYANAIR DAC,

Plaintiff,

v.

BOOKING HOLDINGS INC.,  
BOOKING.COM B.V., KAYAK SOFTWARE  
CORPORATION, PRICELINE.COM LLC,  
and AGODA COMPANY PTE. LTD,

Defendants.

C.A. No. 20-01191-WCB

**BOOKING.COM B.V.'S RESPONSES TO PLAINTIFF  
RYANAIR DAC'S SECOND SET OF REQUESTS FOR ADMISSION**

**OF COUNSEL:**

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Kathleen Hartnett  
Kristine Forderer  
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*Attorneys for Defendants*

**REQUEST FOR ADMISSION NO. 9:**

Admit that You block automated systems you suspect of conducting an unreasonable amount of searches.

**RESPONSE TO REQUEST FOR ADMISSION NO. 9:**

Booking.com objects to this Request as vague and ambiguous including as to the time frame to which it purports to apply. Additionally, Booking.com objects to this Request as not relevant to any claim or defense of any party. On the basis of Booking.com's general and specific objections, Booking.com will not respond to this Request. To the extent a response is required, denied.

**REQUEST FOR ADMISSION NO. 10:**

Admit that You block automated systems you suspect of conducting an unreasonable amount of searches inter alia to prevent disruption and/or harm to your website.

**RESPONSE TO REQUEST FOR ADMISSION NO. 10:**

Booking.com objects to this Request as vague and ambiguous including as to the time frame to which it purports to apply. Additionally, Booking.com objects to this Request as not relevant to any claim or defense of any party. On the basis of Booking.com's general and specific objections, Booking.com will not respond to this Request. To the extent a response is required, denied.

**REQUEST FOR ADMISSION NO. 11:**

Admit that extensive searching on Your website has placed "undue stress," as understood in Your Customer Terms of Service, on Your website in the past ten years.



**RESPONSE TO REQUEST FOR ADMISSION NO. 11:**

Booking.com objects to this Request as not relevant to any claim or defense of any party. Booking.com further objects to the request as unduly burdensome. On the basis of Booking.com's general and specific objections, Booking.com will not respond to this Request further. To the extent a response is required, denied.

**REQUEST FOR ADMISSION NO. 12:**

Admit that Booking.com sometimes does not share customers' credit card information with Etraveli, so Ryanair could not receive the customers' credit card information in those instances.

**RESPONSE TO REQUEST FOR ADMISSION NO. 12:**

Booking.com objects to this Request as vague and ambiguous including as to the hypothetical posed by the request. Subject to and on the basis of Booking.com's general and specific objections, admitted that in some cases, depending on the jurisdiction and model of engagement, the customer pays Etraveli directly, and in some cases the customer pays Booking.com directly. Booking.com does not pass along the customer credit card information to Etraveli when the customer pays Booking.com directly. Except as expressly admitted, this request is denied.

**REQUEST FOR ADMISSION NO. 13:**

Admit that Ryanair flights sold on Booking.com may be marked up.

**RESPONSE TO REQUEST FOR ADMISSION NO. 13:**

Booking.com objects to the Request as vague and ambiguous and further objects that the request is not relevant to any claim or defense. Subject to and on the basis of Booking.com's general and specific objections, Booking.com responds as follows: the prices for flight fares

displayed on Booking.com are provided to Booking.com through and subject to Booking.com's agreement with Etraveli. Subject to that agreement, flight fares may be marked up or marked down by Etraveli when they are provided to Booking.com. Except as expressly admitted, this request is denied.

OF COUNSEL:

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Dated: October 6, 2023

/s/ Tyler E. Cragg

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*Attorneys for Defendants*

**CERTIFICATE OF SERVICE**

I hereby certify that on October 6, 2023, a true and correct copy of the foregoing document was caused to be served on the following counsel of record in the manner indicated.

**BY ELECTRONIC MAIL**

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/s/ Tyler E. Cragg  
Tyler E. Cragg (#6398)

# EXHIBIT 29

**PUBLIC VERSION -  
CONFIDENTIAL MATERIAL OMITTED IN FULL**

# EXHIBIT 30

**PUBLIC VERSION - CONFIDENTIAL MATERIAL OMITTED**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

RYANAIR DAC,

Plaintiff,

v.

BOOKING HOLDINGS INC.,  
BOOKING.COM B.V., KAYAK SOFTWARE  
CORPORATION, PRICELINE.COM LLC,  
and AGODA COMPANY PTE. LTD,

Defendants.

C.A. No. 20-01191-WCB

**BOOKING.COM B.V. RESPONSES AND OBJECTIONS TO PLAINTIFF  
RYANAIR DAC'S THIRD SET OF INTERROGATORIES**

OF COUNSEL:

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*Attorneys for Defendants*

**RESPONSE TO INTERROGATORY NO. 9:**

In addition to the foregoing General Objections, which Booking.com incorporates by reference, Booking.com specifically objects to this Interrogatory on the grounds that it seeks information that is not relevant to any claim or defense, is overly broad, unduly burdensome, and is redundant with other sources of discovery. Whether and why Booking.com blocks certain visitors to its website has no bearing on Ryanair's CFAA claims. Booking.com further objects to this Interrogatory because it seeks information protected by the attorney-client privilege and work product doctrine. Booking.com also objects to this Interrogatory as vague and ambiguous as it relies on the undefined terms "party" and "blocked."

Subject to the foregoing General Responses, and subject to and without waiving any of its General and Specific Objections, Booking.com responds as follows:

Booking.com directs Ryanair to the testimony of Marcos Guerrero, the Rule 30(b)(6) designee for Booking.com, at 175:12 – 178:2. Other than as stated in that deposition and on the basis of Booking.com's General and Specific objections, Booking.com will not respond to this Interrogatory.

**INTERROGATORY NO. 10:**

Explain in detail your contention that Booking.com has lost "revenue from repeat customers" due to Ryanair's conduct and a calculation of the damages you claim from this lost revenue.

**RESPONSE TO INTERROGATORY NO. 10:**

In addition to the foregoing General Objections, which Booking.com incorporates by reference, Booking.com specifically objects to this Interrogatory on the grounds that: (1) it is vague and ambiguous as it relies on the undefined phrase "Ryanair's conduct"; (2) it is overly

broad and unduly burdensome to the extent it seeks all reasons behind Booking.com's contention; and (3) it seeks information protected by the attorney-client privilege, work product doctrine, or any other applicable law, privilege, protection, or doctrine.

Subject to the foregoing General Responses, and subject to and without waiving any of its General and Specific Objections, Booking.com responds as follows:

**RESPONSE CONTAINS HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY INFORMATION**



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

OF COUNSEL:

John H. Hemann  
Kathleen Hartnett  
Kristine Forderer  
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Dated: October 6, 2023

/s/ Tyler E. Cragg

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*Attorneys for Defendants*

**CERTIFICATE OF SERVICE**

I hereby certify that on October 6, 2023, a true and correct copy of the foregoing document was caused to be served on the following counsel of record in the manner indicated.

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/s/ Tyler E. Cragg

Tyler E. Cragg (#6398)

**VERIFICATION**

I, Marcos Guerrero, declare:

1. I have been authorized by Booking.com B.V. ("Booking.com") to make this verification as to Booking.com's Responses and Objections to Plaintiff Ryanair DAC's Third Set of Interrogatories.

2. I have read the foregoing and am familiar with the contents thereof. Certain matters set forth therein are not within my personal knowledge. Insofar as there are facts included based on a composite of information from other individuals, I am informed and believe that the information set forth therein, and for which I lack personal knowledge, is true and correct.

3. Said responses and objections were prepared with the assistance of counsel for Kayak upon whom I have relied. The responses set forth therein, subject to inadvertent and undiscovered errors, are based upon and necessarily limited by the records and information still in existence, presently recollected, and thus far discovered in the course of preparation of these responses to the Interrogatories. Subject to the limitations as set forth herein, said responses are true to the best of my knowledge, information, and belief.

4. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

October 5, 2023

Executed this \_\_\_\_ th day of October, 2023.

\_\_\_\_ Marcos Guerrero (Printed Name)

\_\_\_\_ (Signature)



# EXHIBIT 31

**PUBLIC VERSION -  
CONFIDENTIAL MATERIAL OMITTED IN FULL**

# EXHIBIT 32

**PUBLIC VERSION - CONFIDENTIAL MATERIAL OMITTED**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

RYANAIR DAC,

Plaintiff,

v.

C.A. No. 20-01191-WCB

BOOKING HOLDINGS INC.,  
BOOKING.COM B.V., KAYAK  
SOFTWARE CORPORATION,  
PRICELINE.COM LLC, and AGODA  
COMPANY PTE. LTD,

Defendants.

**BOOKING.COM B.V.'S THIRD AMENDED AND  
SUPPLEMENTAL RESPONSES AND OBJECTIONS TO  
PLAINTIFF RYANAIR DAC'S INTERROGATORY NO. 4**

OF COUNSEL:

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*Attorneys for Defendants*

11. Booking.com objects to the use of the undefined term “Ryanair Data” which is vague, ambiguous, and unintelligible. Booking.com will construe the term “Ryanair Data” to mean flight schedules and fares displayed on the public Ryanair website.

12. Booking.com objects to Plaintiff’s Definition of “Refer,” “reflect,” “relating,” and “evidencing” and to all Interrogatories containing those terms, as overbroad, unduly burdensome, vague, and ambiguous, and to the extent those Definitions would impose upon Booking.com an obligation in excess of what is called for by the Federal Rules of Civil Procedure. Booking.com further objects to the extent those terms require subjective judgment on the part of Booking.com and its attorneys and would require a conclusion or opinion of counsel in violation of the attorney work product doctrine.

### **III. SPECIFIC OBJECTIONS AND RESPONSES TO INTERROGATORIES**

#### **INTERROGATORY NO. 4:**

Identify each and every Ryanair flight sold on or through your website from January 2018 to present, including but not limited to when the flight was sold, where the flight originated from, where the flight was going to, the date and time of travel, the passenger name record (“PNR”), and what technology or API was used to facilitate the transaction.

#### **RESPONSE TO INTERROGATORY NO. 4:**

In addition to the foregoing general objections, which Booking.com incorporates by reference, Booking.com specifically objects to this Interrogatory on the grounds that: (1) it is vague and ambiguous as it relies on the undefined phrase “sold on or through your website”; (2) it is overly broad and unduly burdensome to the extent it requires Booking.com to identify voluminous information related to “each and every Ryanair flight” for a period of over five years; (3) it is overly broad and not reasonably calculated to lead to the discovery of admissible evidence,

including “when the flight was sold, where the flight originated from, where the flight was going to, the date and time of travel, [and] the passenger name record”; (4) it is compound, complex, and contains multiple subparts; (5) it seeks information outside of Booking.com’s possession, custody, or control; and (6) it seeks information, including the information of third parties, that is confidential, proprietary, or otherwise subject to trade secret protection.

Subject to the foregoing General Responses, and subject to and without waiving any of its General and Specific Objections, Booking.com responds as follows:

Attached as Exhibit A is a HIGHLY CONFIDENTIAL ATTORNEYS’ EYES ONLY document showing the number of Ryanair flights sold through Booking.com each day from the first Ryanair booking in Booking.com’s records to February 25, 2023.

**SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4:**

In addition to the foregoing general objections, which Booking.com incorporates by reference, Booking.com specifically objects to this Interrogatory on the grounds that: (1) it is vague and ambiguous as it relies on the undefined phrase “sold on or through your website”; (2) it is overly broad and unduly burdensome to the extent it requires Booking.com to identify voluminous information related to “each and every Ryanair flight” for a period of over five years; (3) it is overly broad and not reasonably calculated to lead to the discovery of admissible evidence, including “when the flight was sold, where the flight originated from, where the flight was going to, the date and time of travel, [and] the passenger name record”; (4) it is compound, complex, and contains multiple subparts; (5) it seeks information outside of Booking.com’s possession, custody, or control; and (6) it seeks information, including the information of third parties, that is confidential, proprietary, or otherwise subject to trade secret protection.



Subject to the foregoing General Responses, and subject to and without waiving any of its General and Specific Objections, Booking.com responds as follows:

**RESPONSE CONTAINS HIGHLY CONFIDENTIAL INFORMATION SUBJECT TO THE COURT'S JULY 21, 2023 ORDER (D.I. 192) BELOW**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**SECOND SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4:**

In addition to the foregoing general objections, which Booking.com incorporates by reference, Booking.com specifically objects to this Interrogatory on the grounds that: (1) it is vague and ambiguous as it relies on the undefined phrase “sold on or through your website”; (2) it is overly broad and unduly burdensome to the extent it requires Booking.com to identify voluminous information related to “each and every Ryanair flight” for a period of over five years; (3) it is overly broad and not reasonably calculated to lead to the discovery of admissible evidence, including “when the flight was sold, where the flight originated from, where the flight was going to, the date and time of travel, [and] the passenger name record”; (4) it is compound, complex, and contains multiple subparts; (5) it seeks information outside of Booking.com’s possession, custody, or control; and (6) it seeks information, including the information of third parties, that is confidential, proprietary, or otherwise subject to trade secret protection.

Subject to the foregoing General Responses, and subject to and without waiving any of its General and Specific Objections, Booking.com responds as follows:

**RESPONSE CONTAINS HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY INFORMATION**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**RESPONSE CONTAINS HIGHLY CONFIDENTIAL INFORMATION SUBJECT TO  
THE COURT’S JULY 21, 2023 ORDER (D.I. 192) BELOW**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**THIRD SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4:**

In addition to the foregoing general objections, which Booking.com incorporates by reference, Booking.com specifically objects to this Interrogatory on the grounds that: (1) it is vague and ambiguous as it relies on the undefined phrase “sold on or through your website”; (2) it is overly broad and unduly burdensome to the extent it requires Booking.com to identify voluminous information related to “each and every Ryanair flight” for a period of over five years; (3) it is overly broad and not reasonably calculated to lead to the discovery of admissible evidence, including “when the flight was sold, where the flight originated from, where the flight was going to, the date and time of travel, [and] the passenger name record”; (4) it is compound, complex, and contains multiple subparts; (5) it seeks information outside of Booking.com’s possession, custody, or control; and (6) it seeks information, including the information of third parties, that is confidential, proprietary, or otherwise subject to trade secret protection.

Subject to the foregoing General Responses, and subject to and without waiving any of its General and Specific Objections, Booking.com responds as follows:

**RESPONSE CONTAINS HIGHLY CONFIDENTIAL INFORMATION SUBJECT TO THE COURT'S JULY 21, 2023 ORDER (D.I. 192) BELOW**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

OF COUNSEL:

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ewing@rlf.com

*Attorneys for Defendants*

Dated: November 30, 2023

**VERIFICATION**

I, Marcos Guerrero, declare:

1. I have been authorized by Booking.com B.V. ("Booking.com") to make this verification as to Booking.com's Third Amended and Supplemental Responses and Objections to Plaintiff Ryanair DAC's Interrogatory Number 4.

2. I have read the foregoing and am familiar with the contents thereof. Certain matters set forth therein are not within my personal knowledge. Insofar as there are facts included based on a composite of information from other individuals, I am informed and believe that the information set forth therein, and for which I lack personal knowledge, is true and correct.

3. Said responses and objections were prepared with the assistance of counsel for Booking.com upon whom I have relied. The responses set forth therein, subject to inadvertent and undiscovered errors, are based upon and necessarily limited by the records and information still in existence, presently recollected, and thus far discovered in the course of preparation of these responses to the Interrogatories. Subject to the limitations as set forth herein, said responses are true to the best of my knowledge, information, and belief.

4. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

December 4, 2023

Executed this \_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
Marcos Guerrero (Printed Name)



\_\_\_\_\_  
(Signature)

**HIGHLY CONFIDENTIAL  
ATTORNEYS' EYES ONLY**

# **EXHIBIT A**

**PUBLIC VERSION -  
CONFIDENTIAL MATERIAL OMITTED IN FULL**

**HIGHLY CONFIDENTIAL  
ATTORNEYS' EYES ONLY**

# **EXHIBIT B**

**PUBLIC VERSION -  
CONFIDENTIAL MATERIAL OMITTED IN FULL**

# EXHIBIT 33

**PUBLIC VERSION - CONFIDENTIAL MATERIAL OMITTED**

**EXPERT REPORT OF TIMOTHY JAMES O'NEIL-DUNNE**

**Principal, T2Impact Ltd.**

Prepared in connection with

*Ryanair DAC v. Booking Holdings Inc.*, Civil Action 20-1191-WCB (D. Del. Apr. 7, 2023)

**August 31, 2023**

*Contains Material for Attorneys' Eyes Only Pursuant to the Protective Order*



**Expert Report of Timothy O’Neil-Dunne**

*Contains Material for Attorneys’ Eyes Only Pursuant to the Protective Order*

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**1. INTRODUCTION**

I, Timothy O'Neil-Dunne, am the Principal and Managing Partner of T2Impact Ltd. ("T2" or "T2Impact").

I have been retained by Defendants in connection with *Ryanair DAC v. Booking Holdings Inc.*, Civil Action 20-1191-WCB (D. Del.).

Except as otherwise noted, I have personal knowledge of the information set forth in this report. This Report has been prepared based on my knowledge, information supplied to me by Counsel, my review of information produced by Ryanair in this action, and publicly available information. This Report has been prepared based on this information for support of opinions expressed. Should further information be subsequently available to me that materially affects the opinions contained herein, I reserve the right to amend my Report.

In preparing this Report, I was assisted by staff and consultants of T2Impact. I confirm that all opinions given are mine and are truly held by me.

The purpose of this Report is to assess the claims, allegations, and information provided in connection with the pending litigation named above. It is not to be used for any other purpose. I, and my company, disclaim any responsibility for reliance on this Report for any other purpose.

**1.1 Qualifications and Experience**

My professional career has largely centered on the travel industry, and particularly airlines. My work has spanned from business strategy to technology to advertising. I am presently the Principal of T2Impact.

I have a degree in Business Studies specializing in International Marketing from the University of East Anglia in Cambridge, England. Further, I took a compressed two-year course which today can be considered an MBA equivalent.

Pertinent here, I worked at TWA/PARS/Worldspan between 1987-1996. During that time, I developed corporate travel products, served as head of International Technology, and additionally, managed the technology interface with ABACUS, a large GDS operating primarily in Asia. From 1996-1998, I worked at Microsoft as one of the founding team members and Head of International Travel Products for Expedia (one of the earlier and now-largest online travel agencies in the world).

In 1998, I founded a consulting company—T2Impact—which provides technological and commercial project deliveries. Through T2Impact, I have worked with suppliers including airlines, governments, and tourism organizations. T2's projects have included advising Brazilian courts on stabilization of the former national Brazilian carrier Varig; developing the e-commerce strategy for the Saudi Supreme Commission for Tourism and Antiquities; and assisting startups such as eDreams (an online travel agency based in Barcelona, Spain) and ClearTrip (an online travel agency based in Mumbai, India).

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Starting in 2018, I briefly served as Chief Commercial Officer for Flair Airlines.

A full copy of my CV is available at Appendix B.

**1.2 Compensation**

I am being compensated for my work on this case at the rate of \$600.00 per hour. My compensation is not contingent upon my findings or on the result of this proceeding.

**2. INFORMATION CONSIDERED**

The materials that I considered in preparing this report are listed in the Appendices. These materials include documents produced by the parties, written discovery, pleadings and orders in this case, and public documents and sources.

Should any additional relevant information come to my attention, I reserve the right to supplement or amend my report as necessary. I have reserved Appendix A for any additional materials.

**3. SUMMARY OF REPORT AND ANALYSIS**

This Report seeks to contextualize the development and state of the industry sector where travel products, in this case airline products, are bought and sold. This Report will aim to provide a historical perspective of airline distribution; the roles of the supply owners and the travel sellers; to provide context for how a consumer searches and buys travel; and to describe the everyday functioning of the modern travel industry (particularly in Europe).

In particular, in this Report, I reach the following conclusions:

- **First**, the development of modern airline ticket distribution—split between direct and indirect distribution (the latter including intermediaries such as online travel agencies)—can be traced through decades of history in the travel industry. Indeed, direct distribution and indirect distribution (including sales through travel agents) have existed as a framework for at least half-a-century, with the latter using screen-emulating and screen-scraping technology for decades. (See Section 4.)
- **Second**, the modern methods for booking consumer travel demonstrate the later iteration of the direct-indirect distribution framework. The market is currently dominated by the combination of direct distribution—in other words, direct sales by service providers such as airlines—and indirect sales by such market players as online travel agents. (See Section 5.)
- **Third**, modern airlines typically divide into two types of carriers: full-service carriers (FSC) and low-cost carriers (LCC). The business models of these two groups can dictate the method of ticket distribution preferred by a particular carrier or airline. Moreover, there is increasingly a hybrid model, combining FSC and LCC characteristics and distribution models. (See Section 6.)

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- **Fourth**, consumers tend to favor online travel agencies in searching for and booking travel generally and airline tickets in particular. Consumer satisfaction stems from OTAs' ease of use, consumer trust, brand value, and, importantly, aggregation of information. Moreover, this aggregation can prove mutually beneficial, increasing consumer interest in searching for direct bookings with airlines. (See Section 7.)
- **Fifth**, Ryanair is a low-cost carrier with a pronounced focus on ancillary revenue. As it does not fly to the United States, its brand reputation lags that of other airlines and travel brands among U.S.-based travelers. The myRyanair portion of the Ryanair website is primarily a tool of customer personalization and marketing. To book a flight with Ryanair, a traveler—or another person booking a ticket on behalf of the traveler—need not provide their own personal email address, just a valid email address. This is consistent with the decades-long history of intermediaries, agents, and assistants booking travel on behalf of the traveler. (See Section 8.)

### 4. DEVELOPMENT OF THE TRAVEL INDUSTRY AND SALES DISTRIBUTION

This Section traces the historical development of travel distribution methods. This Section begins by providing the key framework for distribution of airline ticket sales: **Direct Distribution** and **Indirect Distribution**. It then traces those distribution methods through two key time periods in the history of the travel industry:

**Pre-Internet.** This period largely takes place prior to the year 2000. During this period, airline ticket sales and consumer purchases operated through a homogenous network of actors and channels of distribution.

**Post-Internet.** This period largely takes place post-2000. During this period, the Internet came to dictate the distribution of travel and ticketing.

#### 4.1 Direct vs. Indirect Distribution of Airline Tickets

Airline ticket sales can be categorized into two primary forms of distribution: Direct Distribution and Indirect Distribution.

**Direct Distribution** occurs when an airline sells its tickets directly to consumers. When using Direct Distribution, an airline typically sells tickets through its own offices, call center or, with the advent of the Internet, on its branded website or mobile application.

This type of distribution offers airlines the most control over the customer experience, as the airline can customize the product and offer additional services, such as ancillary products. Historically, Direct Distribution was the more expensive method of distribution for an airline despite it not having to pay travel agency commission fees. The reasons are discussed below.

**Indirect Distribution** occurs when airline tickets are sold to consumers through indirect channels. These intermediaries are most often travel agencies, and in particular, online travel agencies (OTAs).

**Expert Report of Timothy O'Neil-Dunne***Contains Material for Attorneys' Eyes Only Pursuant to the Protective Order***4.2 Pre-Internet Travel Industry and Distribution**

Before the advent of the Internet, airline ticket sales and consumer purchases operated through a standard, simple network of actors and channels of distribution. Airlines automated their reservation system in around the 1960s and 1970s (typically using specialized large, IBM mainframes). Initially, airline bookings could only be made on the airline systems now known as "PSS," or Passenger Sales and Service. Over time, these systems were opened to additional, limited groups, such as travel agents. In the wake of automation, airline ticket-sale distribution depended on connectivity to these large-scale computer systems.

In the Pre-Internet era, airlines employed both Direct Distribution and Indirect Distribution to sell tickets. Using Direct Distribution, airlines sold tickets directly to customers through their own ticket offices—physical locations, such as airport ticket offices (ATOs) or even city ticket offices (CTOs)—as well as call centers.

Indirect Distribution, by contrast, involved the use of intermediaries such as travel agents. Indirect Distribution peaked during this period—in about 1995, travel-agency distribution made up approximately 70% of all ticket sales. And most of these transactions went via the Global Distribution Systems (also known as "GDS" channels). The agent in most cases, therefore, was preparing the offers to the consumer.

During this time, formal paper tickets were required, and so the effective reach of ticket distribution depended on accessibility to physical ticket-sales locations. Local markets were the most important, making travel agents the most effective way to reach customers. This model came with challenges, however: physical local travel agent locations came with costs, and product and pricing communication could not easily be offered in real time. The result was a less dynamic travel market than the one customers might recognize today.

The indirect channel aggregated behind four major GDS players, who by 1995 had captured over 98% of the licensed travel agents in the USA. These systems provided the connectivity that enabled a travel agent to see almost all schedules and pricing for the airlines. The big four were: Sabre; Galileo (encompassing Apollo); Amadeus (encompassing SystemOne); and Worldspan.

In the original implementation of the GDS systems—then-called CRS systems—access was based on non-intelligent (termed "dumb") mainframe attached terminals. In the mid-1980s, several companies developed systems for supplementing and replacing directly-connected ("dumb") terminals with personal-computer-based solutions. IBM—the mainframe provider—developed different communication emulation boards which allowed personal computers to connect to the airline PSS systems and GDS systems.

Two prominent companies—Lanyon Ltd (based in the UK) and AeroTech Systems Inc. (based in San Jose, CA), then developed screen-access technology, which allowed travel agents and other users to access and retrieve flight information, availability, and pricing directly from airline reservation systems. These systems were "screen emulation," but they evolved into the ability to edit and manipulate the read-outs from these systems. This technology became the earliest implementation of what is now known as "screen scraping," allowing extraction of data from the

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text-based interfaces of airlines CRS systems.

Aerotech's and Lanyon's systems would essentially mimic the interactions a human would have with the airline's reservation interface: sending commands to the system, interpreting the text-based responses, and extracting the relevant information. And so if a travel agent wanted to check the availability and pricing of flights between two cities, Lanyon's software would log into the airline's reservation system using the appropriate credentials, navigate through the menu options, input the origin and destination, select the desired travel dates, and then capture the resulting text-based output that showed flight options and fares.

### **4.3 Post-Internet Travel Industry and Distribution**

The arrival of the Internet transformed the travel industry and distribution of airline tickets. Just like almost every other business sector, travel consumers warmed quickly to the Internet.<sup>1</sup>

The biggest change was in reach and speed. Personalized customer service, particularly in conjunction with loyalty programs and frequent-flyer benefits ascended in importance. Prior to the Internet, these programs were stymied by a lack of real-time communication, particularly at the point of sale. The Internet removed that barrier. Airlines could now target both frequent travelers who were mostly business as well as infrequent leisure travelers and develop brand loyalty (or "stickiness") with their customers.

With enhanced direct supply access, customers could receive real-time assistance for flight changes, rebooking, cancellations, and other travel-related queries. Airlines could ensure that their customers received prompt and accurate information, enhancing customer satisfaction and loyalty.

A few additional changes are of note: First, the old model of the brick-and-mortar travel agent evolved into the online travel agent, or "OTA," albeit with many new players. The Internet allowed OTAs to increase the scale and yield of ticket sales. For instance, in 1996, Microsoft launched Expedia as a specialized business unit. Expedia would eventually acquire Travelocity (originally founded within Sabre) and Orbitz (originally founded by a group of full-service US-based airlines) and grow into one of the world's largest OTAs.

Second, a new type of carrier emerged: LCCs, or Low-Cost Carriers. These carriers, which began with Southwest Airlines in the United States and were followed by companies like Ryanair in Europe, eschewed many of the traditional carriers' processes. As one example, LCCs catalyzed the use of ancillary services—unbundling non-ticket products (such as baggage fees and on-board services) from the cost of the basic flight ticket itself.

Third, the screen-scraping systems developed during the pre-Internet era adapted to the Internet-based distribution of tickets.

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<sup>1</sup> See, for instance, <https://www.statista.com/chart/29622/travel-bookings-online-vs-agency>, 2022 survey findings on consumer preference for online booking of travel.



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**5. MODERN METHODS FOR BOOKING CONSUMER TRAVEL**

This Section begins by assessing these options, and in particular, the typical ways a consumer can pursue tickets through Direct Distribution and Indirect Distribution. It then discusses how an airline's business model will drive an airline's decision to encourage and pursue a particular mode of distribution.

**5.1 Direct Distribution**

**5.1.1 Airlines**

This is now the most common distribution type for airlines, and it involves selling tickets directly to customers through their own websites/apps or via call centers. This channel gives airlines the most control over their pricing and marketing, and it allows them to collect customer data that can be used to improve their loyalty programs and targeted marketing campaigns.

Airlines may often partner with other travel companies, such as hotels, car-rental companies, and credit-card companies, to sell bundled travel products.

**5.2 Indirect Distribution**

**5.2.1 Online Travel Agents**

Online Travel Agents, or OTAs, are websites or mobile apps that allow customers to book travel-related products and services, such as flights, hotels, and car rentals. OTAs typically work with a network of travel suppliers, such as ticket aggregators, airlines, hotels, car rental companies, and other sources, to offer their products and services to customers. OTAs typically charge a commission to travel suppliers for each booking that they make.

OTAs, as their name implies, are an outgrowth of traditional brick-and-mortar travel agencies. Their online presence makes them more accessible to customers.<sup>2</sup> Moreover, while traditional travel agents rely on customer fees for their services, OTAs may charge a commission to travel suppliers or markup the products they sell. In the end, OTAs are typically cheaper to consumers than conventional travel agencies.

Key examples of OTAs include Expedia, Booking.com, and eDreams.

OTAs have become a substantial player in the travel industry, and one of the most common ways that consumers book travel generally and airline tickets in particular. In terms of travel websites generally, for instance, Expedia is now the second-most visited travel website as of July 2023,






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<sup>2</sup> Estimates attribute more than half (51%) of OTA gross bookings in 2021 to mobile transactions. <https://www.phocuswire.com/the-state-of-online-travel-agencies>.



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with Booking.com coming in fourth.<sup>3</sup> Notably, both OTA websites were more visited than the most-visited airline website—southwest.com (for Southwest Airlines).

Rank ①	Website ①	Category ①	Rank Change ①
1	 tripadvisor.com	Travel and Tourism > Travel and Tourism - Other	=
2	 expedia.com	Travel and Tourism > Accommodation and Hotels	=
3	 airbnb.com	Travel and Tourism > Accommodation and Hotels	=
4	 booking.com	Travel and Tourism > Accommodation and Hotels	=
5	 southwest.com	Travel and Tourism > Air Travel	=

And moving forward, OTAs are projected to occupy a continually sizable presence in airlines sales.<sup>4</sup>

<sup>3</sup> Graphic and information are available at <https://www.similarweb.com/top-websites/united-states/travel-and-tourism/>.

<sup>4</sup> The following graphic can be found in the *U.S. Travel Market Report 2022-2026*, available at <https://www.phocuswright.com/Travel-Research/Market-Overview-Sizing/U-S-Travel-Market-Report-2022-to-2026>.

**Expert Report of Timothy O'Neil-Dunne***Contains Material for Attorneys' Eyes Only Pursuant to the Protective Order***5.2.2 Metasearch Company**

Another valuable type of player in the world of travel distribution is the metasearch company. Metasearch engines are websites that aggregate flight (and other travel-related) search results from multiple airlines and travel agencies. This makes it easy for consumers to compare prices and find the best deals on flights.

Metasearch was originally a scanning function with the intermediary running a system called a “web crawler” over all the likely players in a market and then presenting a consolidated display of offers. In turn the metasearch would then direct the customer through a link through to a selling website who can service the booking. Metasearch has evolved into more and more real-time where the suppliers and travel sellers provide offers to the metasearch brand.

Key examples of search and Metasearch engines include Skyscanner, Kayak, and Google Flights.

**5.2.3 Global Distribution Systems, or GDSs**

GDSs are computer reservation systems that are used by travel agencies and other travel intermediaries to book flights. GDSs are not typically accessed directly by consumers. Airlines pay a commission to GDSs for each ticket that is sold through their systems. While GDSs are still a major distribution channel for airlines, their importance has been declining in recent years as more and more people are booking flights directly through airline websites. This is likewise true

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of GDSs in the context of OTAs, which are also eschewing GDSs in favor of direct connections via API or NDC.<sup>5</sup>

## **6. AIRLINE DISTRIBUTION PREFERENCES – FULL SERVICE AND LOW-COST CARRIERS**

The distribution strategy of airline tickets is not driven solely by consumers. An airline will also determine how aggressively it will pursue either Direct Distribution or Indirect Distribution, and this decision is usually driven by the airline’s service strategy. (Moreover, an airline’s market share can affect its ability to pursue a distribution strategy—a more dominant airline has more ability to dictate its distribution.) Airlines typically divide into one of two categories: Full-Service Carriers (FSCs) and Low-Cost Carriers (LCCs). Full-Service Carriers typically rely more on Indirect Distribution, while LCCs rely more on Direct Distribution and, in some instances, metasearch.<sup>6</sup>

### **6.1 Full-Service Carriers**

FSCs typically offer a wider range of amenities and services, such as free checked bags, seat assignments, and meals. From the legacy background, FSCs were more comfortable selling a bundled product with the ticket. In other words, the purchase of an airline ticket also brought with it the purchase of the ancillary amenities and services included in the price. These amenities come at a cost, however, and FSCs typically charge higher fares than LCCs frequently to defray the more expensive model and flexibility. FSCs commonly rely on online travel agencies to offer flights.

FSCs also have a more global reach, and they offer flights to a wider range of destinations. They typically utilize “hub and spoke” networks: connecting between major hub cities, and then onward to surrounding airports connected to the hubs.

Leading players among FSCs include American Airlines (the world’s largest airline by passengers), United Airlines, Delta Air Lines, Lufthansa group (which includes Swiss, Austrian, and Brussels airlines), Air France (which includes KLM and other airlines), and IAG (which includes British Airways, Iberia, Aer Lingus, and other, smaller airlines).

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<sup>5</sup> API stands for “Application Programming Interface.” An API is a software interface that allows two or more computer programs to communicate with one another. NDC stands for “New Distribution Capability.” NDC is an XML-based communication standard, created by the International Air Transportation Association (an airline trade association), that allows airlines to convey content directly to third parties such as OTAs through APIs.

<sup>6</sup> For background on this section, see Rozenberg and Szabo, *Comparison of FSC and LCC and Their Market Share in Aviation*, International Review of Aerospace Engineering (Oct. 2014), available at [https://www.researchgate.net/publication/287458692\\_Comparison\\_of\\_FSC\\_and\\_LCC\\_and\\_their\\_market\\_share\\_in\\_aviation](https://www.researchgate.net/publication/287458692_Comparison_of_FSC_and_LCC_and_their_market_share_in_aviation).

**Expert Report of Timothy O'Neil-Dunne***Contains Material for Attorneys' Eyes Only Pursuant to the Protective Order***6.2 Low-Cost Carriers**

LCCs typically offer a more basic product, with fewer amenities and services. This strategy allows LCCs to keep their base fares lower than FSCs. LCCs also tend to focus on short-haul flights, and they often operate point-to-point routes. Increasingly, some of these carriers have adopted a new moniker, ULCC, Ultra Low-Cost Carriers. These carriers continue to emphasize the LCC model in the face of more hybrid carriers.

Leading players among LCCs include Ryanair and Spirit Airlines.

**6.3 Summary Comparison of FSCs and LCCs**

Below is a summary chart comparing FSCs and LCCs along several key features and attributes.

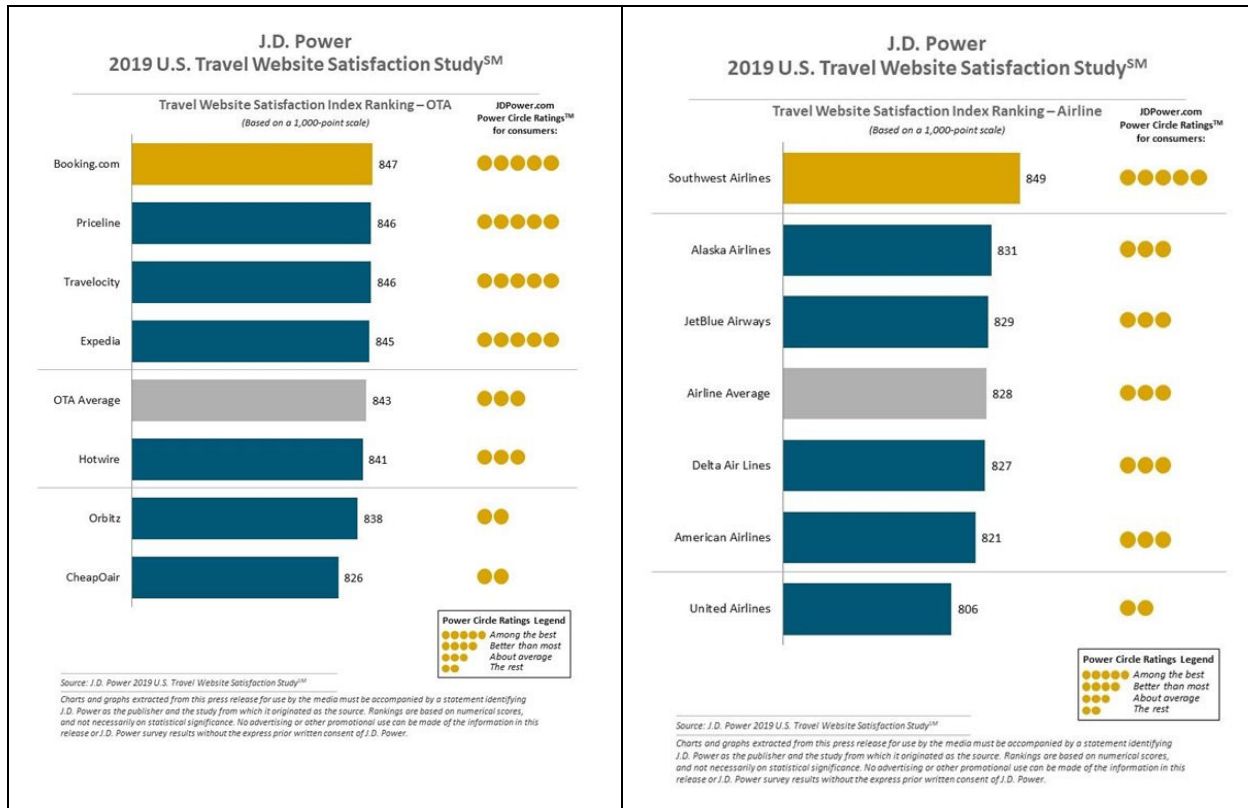
<b>Feature</b>	<b>FSC</b>	<b>LCC</b>
<b>Examples</b>	United Airlines; Delta Air Lines; Lufthansa	Flair Airlines; Spirit Airlines; Ryanair; Southwest Airlines
<b>Typical distribution channels</b>	Direct, GDSs, partnerships, OTAs	Direct, GDSs
<b>Travel Agents</b>	Yes	Sometimes
<b>Amenities and services</b>	More available	Fewer available
<b>Fares</b>	Higher	Lower
<b>Ancillaries</b>	Typically bundled	Typically unbundled
<b>Global reach</b>	Wider	Narrower
<b>Focus</b>	Long-haul and short haul	Short haul
<b>Alliances</b>	Global Big 3	None unless part of a group

**7. BENEFITS OF OTAs IN THE TRAVEL INDUSTRY****7.1 Consumer Satisfaction**

Consumers tend to view OTAs—and booking through them—as advantageous compared to booking directly with airlines. A 2019 JD Power Travel App Satisfaction Study, for instance, found that “travel apps and websites created by legacy hotel, airline and rental car brands [] lag[]

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those of digital native online travel agencies (OTAs)[.]” OTAs outscored many airline websites and apps, with Booking.com and Priceline leading the way.<sup>7</sup>



Consumers' relative satisfaction with online travel agency websites as opposed to airline websites likely stems from a few notable features of OTAs. OTAs providing more **Comprehensive Access** to neutral information for consumers—they offer a one-stop shop for consumers hoping to compare prices, travel information, and available options. Moreover, platforms like Expedia and Booking.com combine flight search with other travel information, such as hotel reservation details.<sup>8</sup> Related, this consolidation of information leads to **Time and Cost Efficiency** for travelers, who can quickly compare price and availability information. Finally, certain online travel agency platforms build in user reviews alongside booking information, leading to increased **Transparency**. TripAdvisor, for instance, is notable for this feature—advertising its community reviews alongside booking options.<sup>9</sup>

<sup>7</sup> For quotations, background, and graphic, see [https://www.hospitalityupgrade.com/\\_news/NewsArticles/Travel-Industry-Apps-and-Websites-Continue-to-Play-Catch-Up-with-Digital-Leaders-in-Other-Industries,-J.D.-Power-Finds.asp/](https://www.hospitalityupgrade.com/_news/NewsArticles/Travel-Industry-Apps-and-Websites-Continue-to-Play-Catch-Up-with-Digital-Leaders-in-Other-Industries,-J.D.-Power-Finds.asp/).

<sup>8</sup> For general background, see <https://www.rezgo.com/blog/advantages-and-disadvantages-of-online-travel-agencies-otas/>.

<sup>9</sup> See <https://www.tripadvisor.com/> (“Trust the process: We work hard to screen reviews”). Note that TripAdvisor directs users via link to other websites to complete the booking process.

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This is further underscored by survey data from the related hotel industry. When travelers who booked hotels with OTAs were queried on their reasons for doing so, their top answers included:<sup>10</sup>

1. “The website is easy to use” (47%)
2. “I am used to booking travel this way” (37%)
3. “I trust the brand” (34%)
4. “Online travel agencies typically have the best prices” (30%)
5. “It is easy to book all of your travel in one place” (29%)
6. “That website had the most selection” (28%).

These responses beat out options such as “I like their mobile app,” and “I am a member of that online travel agency’s loyalty/rewards program.” In short, OTAs appear to capitalize on consumer preference of collection of information, transparency, trust, and selection.

## **7.2 Information-Sharing and Aggregation**

Information-sharing and aggregation is key to the travel industry. To be sure, information sharing is normal in most forms of two-sided markets in commerce and ecommerce, as a mutually beneficial arrangement. (A “two-sided marketplace” is a platform or market that brings together two sets of parties—usually buyers and sellers—coordinated around a specific type of product or service.<sup>11</sup>) But its benefits are heightened in the travel industry, given the complexity of transactions—both transactions and comparison shopping are eased by information sharing.

From a consumer (i.e., traveler) perspective, OTAs can provide a powerful information-gathering and presentation tool, helping consumers by compiling and comparing different flight itinerary and fare information.<sup>12</sup>

Moreover, the information-sharing feature of OTAs can also prove beneficial to airlines (i.e. sellers). OTAs—in presenting customers information—often do not substitute for consumers visiting airline websites as well. To the contrary, studies have found that OTAs can catalyze

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<sup>10</sup> Survey data available at <https://www.pegs.com/blog/why-do-travelers-prefer-booking-with-otas/>.

<sup>11</sup> <https://www.sharetribe.com/how-to-build/two-sided-marketplace/>.

<sup>12</sup> Holland, Jacobs & Klein, *The role and impact of comparison websites on the consumer search process in the US and German airline markets*, *Inf Technol Tourism* 16:127-48, at 128 (2016). The paper is available at <https://link.springer.com/article/10.1007/s40558-015-0037-9>.

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consumers to search further to compare prices, including directly visiting the websites of airlines themselves.<sup>13</sup>

In short, OTAs can at once be a clear and navigable process for consumers looking to assess their options, as well as part of a broader, mutually beneficial ecosystem with airlines. An information ecosystem, in which airline fares and schedules are shared between various ticket distributions (Direct and Indirect alike), can prove mutually beneficial.

### **7.2.1 Screen Scraping as Information Aggregation Tool**

Many OTAs function using a tool called “screen scraping.” Screen scraping, sometimes referred to as screen parsing, automates the process of accessing a web service and recording, or “scraping” the information displayed on the screen.<sup>14</sup> The process extracts data from a computer screen display by reading the pixels on the screen and converting them into text or other data formats. Screen scraping is often used to extract data from websites, but it can also be used to extract data from other types of applications, such as spreadsheets, databases, and word processing documents.

Screen scraping offers several key benefits. At a high-level, its value is two-fold: aggregation of data; and providing access where and when conventional access is difficult or impossible. In particular, the benefits include:

- **Automated Data Extraction.** Screen scraping automates the process of extracting data from a website or application. This can save time, money, effort, and improve the accuracy of data extraction.
- **Collection from Multiple Sources.** Screen scraping can be used to extra data from multiple sources, such as websites, spreadsheets, and databases. Screen scraping is therefore particularly well suited for industries where the inputs are not standardized.
- **Low Cost.** Screen scraping is a relatively inexpensive method of compiling information from disparate sources. From both a supplier (airline) and buyer (traveler) perspective, the aggregation of information for little expense helps to publicize fare and booking information while maximizing profitability (to the airline) and/or savings (to the traveler).
- **Speed and Accuracy.** Automated screen scraping is faster than manual review and compilation as well as more accurate.

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<sup>13</sup> *Id.* at 141-42.

<sup>14</sup> See <https://www.techopedia.com/definition/16597/screen-scraping>; see also Saram Han & Christopher K. Anderson, *Web Scraping for Hospitality Research: Overview, Opportunities, and Implications*, Cornell Hospitality Quarterly 62(1):89-104, at 89 (Nov. 2020), available at <https://journals.sagepub.com/doi/full/10.1177/1938965520973587> (“Web scraping is the process of creating a computer program to download, parse, and organize data from the web in an automated manner.”).



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Screen scraping is a particularly common and relevant tool in the travel industry. As noted in the historical development section of this Report, screen-emulation and screen-scraping have been used in the travel industry generally and the airline industry in particular since the 1980s, with their roots in the deployment of personal computers in airline ticket distribution.

Indeed, publications estimate that the travel industry may be the third most likely business sector to be scraped.<sup>15</sup> Websites seeking to aggregate flight information routinely pull from a variety of online sources. The travel industry tends to be a diverse technology ecosystem—there are many different sources and users, with little uniformity in standards of how data is presented. The underlying information (such as fares and schedules) change rapidly given flight patterns and dynamic pricing.<sup>16</sup>

**8. RYANAIR**

This Section of the Report provides background on Ryanair—an Irish-based low-cost airline founded in 1984 and which is the plaintiff in this litigation. Ryanair has a unique business model compared to other airlines in the industry, and contextualizing Ryanair provides valuable insights into its policies, practices, and technology. In particular, this Section focuses on Ryanair’s business model—including the centrality of ancillary revenue to Ryanair—before examining the ticket-purchasing process on the Ryanair website, including the “myRyanair” portion of the Ryanair website.

**8.1 Ryanair’s Model**

Ryanair’s business model is based on offering no-frills, low-cost flights to a wide range of destinations across Europe, the Middle East, and North Africa. The airline focuses on short-haul routes and primarily serves secondary airports, which often have lower landing fees and operational costs compared to major airports. By utilizing secondary airports (alongside a host of other techniques, like those noted below), Ryanair can offer lower fares to customers and target cost-conscious leisure and business travelers. Ryanair does not fly to any destinations in the United States.

One of the key pillars of Ryanair’s success is its focus on cost reduction. The airline has implemented numerous cost-cutting measures throughout its operations. This includes operating primarily a single type of aircraft (Boeing 737s) to simplify maintenance and crew training,<sup>17</sup>

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<sup>15</sup> For one publication making this proposition, see <https://www.blog.datahut.co/post/data-scraping-in-travel-industry>. For another example of a publication examining the impact of screenscraping on the media, travel, and ecommerce industries, see [https://www.humansecurity.com/hubfs/HUMAN\\_Report\\_Aberdeen\\_The-Business-Impact-of-Website-Scraping.pdf?hsLang=en-us](https://www.humansecurity.com/hubfs/HUMAN_Report_Aberdeen_The-Business-Impact-of-Website-Scraping.pdf?hsLang=en-us).

<sup>16</sup> See generally Han & Anderson, *Web Scraping for Hospitality Research* (“Introduction”).

<sup>17</sup> As of summer 2023, Ryanair’s fleet was comprised of 565 aircrafts, with the vast majority being Boeing 737 planes. <https://corporate.ryanair.com/about-us/our-fleet/>.



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negotiating advantageous agreements with aircraft manufacturers and suppliers, minimizing overhead costs, and implementing innovative cost-saving practices such as shorter turnaround times and fuel efficiency measures. By maintaining a rapid aircraft turnaround time, Ryanair can increase the number of flights per day and achieve higher productivity, enabling the airline to generate more revenue from each aircraft.

**8.1.1 Importance of Ancillary Revenue to Ryanair**

To keep base fares low, Ryanair employs a variety of ancillary revenue strategies. The airline offers numerous optional services and add-ons for which passengers are charged, including baggage fees, priority boarding, seat selection, in-flight refreshments, and onboard retail. These ancillary services contribute significantly to the airline's overall revenue and help offset low base fares. While a full list of Ryanair's ancillary costs are available on its website,<sup>18</sup> this Report highlights a few key costs here.

- **Check-In.** All Ryanair passengers must check in online. Otherwise, Ryanair will charge the passenger £55 to check in at the airport.
- **Boarding-Pass Printing.** While Ryanair passengers may usually use the Ryanair mobile app to store their boarding pass, customers who wish to use a physical boarding pass (or need to, given a lack of smartphone) will need to print the boarding pass at home. Customers who forget must pay a £20 "boarding pass reprint fee."
- **Name Change:** If the traveler misspells their name, Ryanair issues a change fee of £115 pounds for online changes, or a £160 pounds if changed by an agent.
- **Flight Change Fee:** If a traveler wants to change his or her flight with Ryanair, he or she will have to pay a flight change fee of usually £45 per person.
- **Baggage:** Ryanair's standard fee allows only "one small personal bag" to be brought on board, which must be no larger than 15 inches x 8 inches x 10 inches (40cm x 20cm x 25cm). Otherwise, customers can pay between £6 - £30 for priority boarding and 2 cabin bags (the small personal bag, plus one bag of no more than 10 kg, to be stored overhead), or between £12 - £50 to check-in a bag of up to 20 kg.

Ryanair's financial summary demonstrates the substantial role that ancillary revenue plays in Ryanair's overall revenue.<sup>19</sup>

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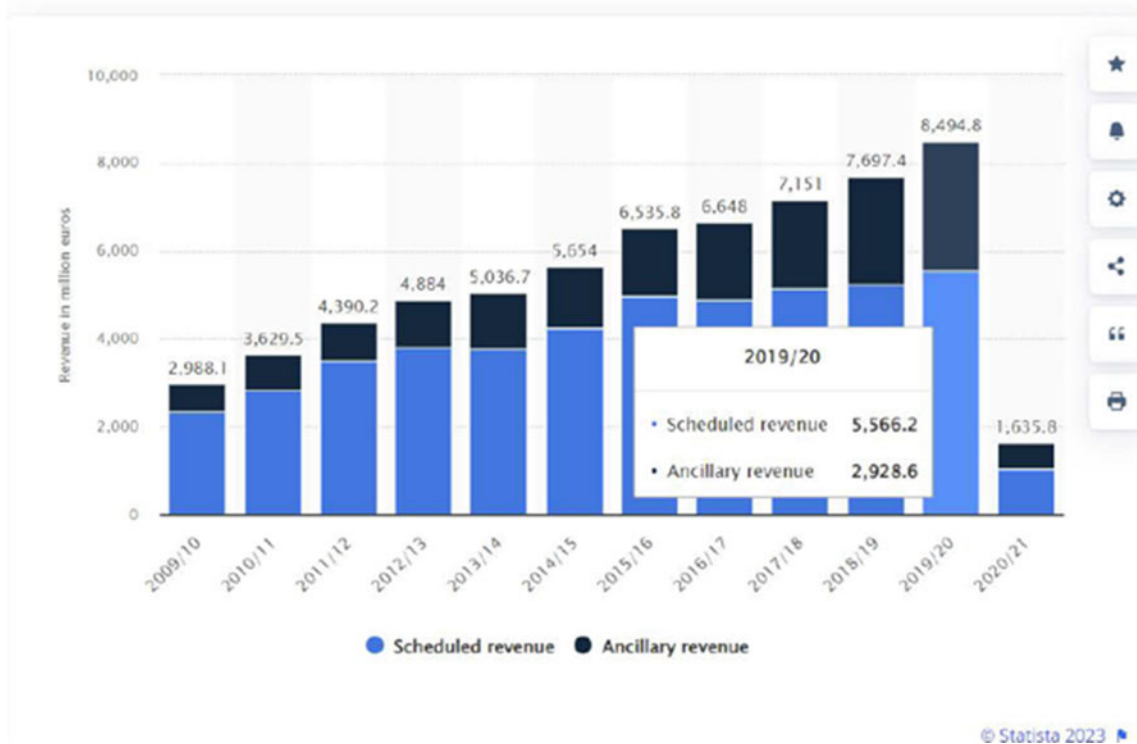
<sup>18</sup> <https://www.ryanair.com/us/en/useful-info/help-centre/fees>.

<sup>19</sup> Graphic and underlying information are available in the Ryanair Group Annual Report 2023, available at <https://investor.ryanair.com/wp-content/uploads/2023/07/Ryanair-2023-Annual-Report.pdf>.

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INCOME STATEMENT	MAR 31, 2023	MAR 31, 2022	MAR 31, 2021
	€'m	€'m	€'m
Scheduled Revenue	6,930	2,653	1,036
Ancillary Revenue	3,845	2,148	600
<b>Total Revenue</b>	<b>10,775</b>	<b>4,801</b>	<b>1,636</b>

Moreover, Ryanair's reliance on ancillary revenues has increased over the past decade. Publicly available information shows that—at least prior to the global COVID-19 pandemic starting in 2020—ancillary revenue constitutes a greater percentage of Ryanair's revenue than was historically the case.<sup>20</sup>

**Ryanair's revenue from 2009 to 2021, by segment***(in million euros)*

<sup>20</sup> Graph and underlying information are available at <https://www.statista.com/statistics/1126130/ryanair-revenue-segment/>.

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**8.1.2 Ryanair's Third-Party Agreements as to Price Comparison and Indirect Distribution**

Ryanair has entered into licensing agreements with websites and services for price-comparison purposes. [REDACTED]

[REDACTED]

[REDACTED]<sup>23</sup>

**8.2 myRyanair**

This Section reviews the myRyanair portion of Ryanair's website. In particular, this Section seeks to explain the function, use, and purpose of the myRyanair portion of the website.

To help further contextualize the Ryanair website and myRyanair, I have provided in Appendix D screenshots from the booking process through Ryanair.com, based on an actual flight booking I made through Ryanair, in conjunction with T2Impact.

**8.2.1 myRyanair Login**

The myRyanair section is a customer portal that allows customers to manage their bookings, check in for flights, and access other website features. The myRyanair section of the Ryanair website is otherwise largely indistinguishable from any other part of the Ryanair website. The information a customer may access in myRyanair is limited to the customer's own flight information. As is common in airline websites, the account does not reveal private or confidential information about the airline or other customers.

myRyanair requires users to create an account, based on a username and password the customer selects. This is not unique to Ryanair.com. Many websites require users to create an account and login to access certain features. And like Ryanair, many airline websites allow users to access the

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<sup>21</sup> See, for instance, RYANAIR-BOOKING 0007507 ([REDACTED]); RYANAIR-BOOKING 0007510 ([REDACTED]); RYANAIR-BOOKING 007525 ([REDACTED])

<sup>22</sup> Second Supplemental Response to Interrogatory No. 11 – Plaintiff's Second Supplemental Responses to Defendants' First Set of Interrogatories.

<sup>23</sup> *Id.*

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system as a guest. A myRyanair account is not necessary to access Ryanair's website, but only to complete the purchase of a ticket.

Below is a screenshot of how one signs up for a myRyanair account:

**Log in to continue**  
Make it simple with myRyanair

Continue with Google

Continue with Facebook

Continue with PayPal

or log in with your email

Email address  
email@email.com

Password  
Password

Forgot password?

Log in

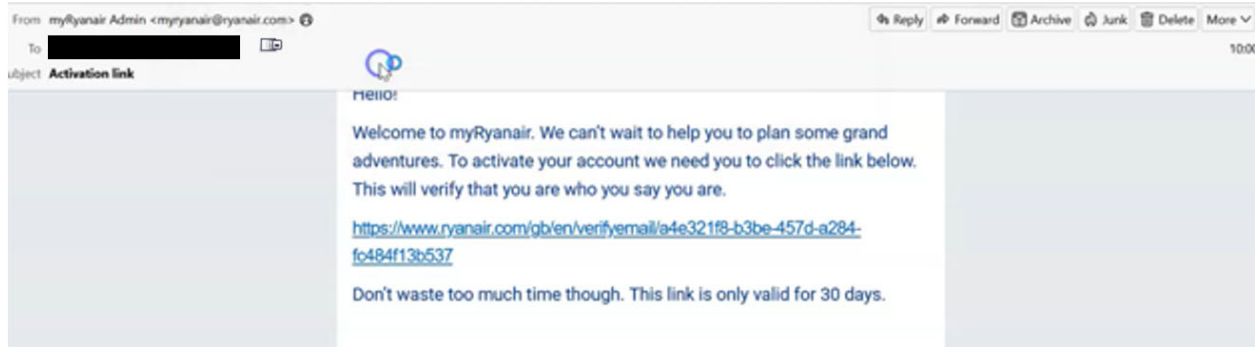
Don't have an account? [Sign up](#)

Ryanair permits users to access myRyanair in a number of ways. As demonstrated in the screenshot, one can:

- Sign up with Facebook
- Sign up with Google
- Sign up with PayPal
- Sign up with email

Moreover, as detailed in Appendix D, a passenger can skip logging into a myRyanair account until he or she has selected their flight, seat, and baggage options, and is ready to enter payment details to check out.

The only notable step between a user signing up for a myRyanair account and access is to respond to a verification email sent by Ryanair, which activates the user's account. A screenshot of one such verification email is produced below. For further information on this process, please see Appendix D.

**Expert Report of Timothy O'Neil-Dunne***Contains Material for Attorneys' Eyes Only Pursuant to the Protective Order***8.2.2 The Use of Non-Traveler Email in Booking Flights on myRyanair**

To create a myRyanair account, a user may use any valid email address (in other words, an email address that can receive emails). This need not be the customer's personal email address. This is consistent with historical practice in the travel industry. As described above, the travel industry has long relied on intermediary booking of travel. And there are a substantial number of commonplace reasons why the email address used for an account is not that of the traveler.

For instance, it is not uncommon that office administrators book travel for their teammates and colleagues. The administrator, in turn, may work with a manual travel agency. Those individuals may well handle booking on behalf of the traveler, including providing their own credentials, and provide the traveler the details he or she needs—the flight details and confirmation number, for instance.

Likewise, a family or small group of friends can, in planning a trip together, rely on one traveler to handle the logistics of the group's airline travel. Again, one family member may wish to use one email to receive all the reservation records. And so the email address of the person handling the bookings and reservations will naturally differ from the ticketed traveler.

In these very common cases, the ownership of the email address and the location of the IP address where the booking is made is irrelevant. OTAs may similarly book tickets on behalf of a willing customer, acting as the delegated authority to book travel and use an email address to receive information and verify the account's availability, while passing the salient details to the traveler.

**8.2.3 The Purpose of myRyanair**

The myRyanair section of the Ryanair website was largely a function of customer personalization. In its original model, prior to myRyanair, Ryanair did not rely on personalization. Instead, the airline's primary selling point was providing the purportedly lowest base fares. This proved successful—Ryanair provided flight offers by email based on country of origin, which were transmitted to potential customers through extensive email campaigns. But the increased volume of flights and emails threatened to lead to negative traveler experience and information overload.

Ryanair's myRyanair system allows customers to store their personal information, such as their name and address. This information can then be used to personalize the customer's experience,

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such as by automatically pre-filling their information when they make a booking or by suggesting flights that are likely to be of interest to them. The personalization is mostly unidirectional—Ryanair creates certain parameters for travelers to fill in, and then Ryanair will generate results targeting the consumer. Below is an illustration of some of the basic personalization data that is used.

In pursuing this personalization approach, Ryanair is engaged in precisely the same business model that online travel agencies engage in: collecting information about customers’ travel preferences and then marketing unique travel experiences to them. As such, Ryanair is attempting to establish itself as a competitor of online travel agencies. As a competitor of online travel agencies, Ryanair benefits by forcing customers to visit its website rather than visiting the websites of the OTAs. (This process—forcing consumers to manually compare Ryanair fares and schedules to other airlines—makes the process more difficult for consumers.) Jockeying for website customers is extremely common in the travel industry.

### **8.3 Brand Awareness and Reputation**

Ryanair does not fly to any destinations in the United States.<sup>24</sup> The United States is therefore known as an “offline” market for Ryanair. Because US-based customers reside outside Ryanair’s market and personalization efforts, Ryanair has not cultivated the same degree of reputation-building with US customers as with other markets. US-based customers are instead likely to turn to providers and intermediaries they are familiar with and trust, such as OTAs. In that way, OTAs can provide a necessary comfort for US-based travelers looking to book with unfamiliar airlines, such as Ryanair, that otherwise garner less trust.

This difference is borne out by Net Promoter brand reputation scores (“NPS” or “Net Promoter Score”). NPS is a customer loyalty metric that measures how likely customers are to recommend a company to their friends and family.

<sup>24</sup> A list of Ryanair’s flight destinations are available at <https://www.ryanair.com/us/en/cheap-flight-destinations>.

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According to a 2023 CustomerGauge study, Ryanair scored lowest in NPS score among surveyed airlines. Key airline scores from that survey are produced below.<sup>25</sup>

<b>Company</b>	<b>NPS Score</b>
Alaska	71
Lufthansa	57
United Airlines	50
Delta	41
American Airlines	3
EasyJet	-16
Ryanair	-61

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<sup>25</sup> The full survey results are available at: <https://customergauge.com/blog/airline-customer-experience-net-promoter-score>.

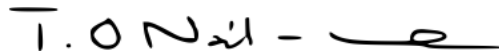
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**DECLARATION**

I confirm that this report has been prepared to the best of my ability and represents my true opinion in this matter. I further confirm that the views here are my own and represent them accordingly.

August 31, 2023

A handwritten signature in black ink, appearing to read "T. O'Neil - Dunne", with a stylized flourish at the end.

Timothy James O'Neil-Dunne